

**NOTE: Figures and Appendices are available from the [DOE Reading Room](#).**

**ENVIRONMENTAL ASSESSMENT  
FOR THE  
TRANSFER OF 1100 AREA, SOUTHERN RAIL CONNECTION  
AND ROLLING STOCK,  
HANFORD SITE, RICHLAND, WASHINGTON**

**U.S. DEPARTMENT OF ENERGY  
RICHLAND, WASHINGTON**

**AUGUST 1998**

## PREFACE

This environmental assessment (EA) has been prepared to assess potential environmental impacts associated with the U.S. Department of Energy's proposed action: the transfer of the 1100 Area, southern rail connection and rolling stock to a non-federal entity. Impact information contained herein will be used by the U.S. Department of Energy, Richland Operations Office Manager, to determine if the proposed action is a major federal action significantly affecting the quality of the human environment. If the proposed action is determined to be major and significant, an environmental impact statement will be prepared. If the proposed action is determined not to be major and significant, a Finding of No Significant Impact (FONSI) will be issued and the action can proceed. Criteria used to evaluate significance can be found in Title 40, Code of Federal Regulations (CFR) 1508.27.

This EA was prepared in compliance with the *National Environmental Policy Act* (NEPA) of 1969, as amended, the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and the U.S. Department of Energy Implementing Procedures for NEPA (10 CFR 1021). The following is a description of each section of the EA.

- 1.0 Purpose and Need for Action. This provides a brief statement concerning the problem or opportunity the U.S. Department of Energy is addressing with the proposed action. As necessary, background information is provided.
- 2.0 Description of the Proposed Action. A description with sufficient detail to identify potential environmental impacts is provided.
- 3.0 Alternatives to the Proposed Action. Reasonable alternative actions, which would address the Purpose and Need, are described. A no action alternative, as required by 10 CFR 1021, also is described.
- 4.0 Affected Environment. This provides a brief description of the locale in which the proposed action takes place, and which may be environmentally impacted.
- 5.0 Environmental Impacts. The range of environmental impacts, beneficial and adverse, are described for the proposed action. Impacts of alternatives briefly are discussed.
- 6.0 Permits and Regulatory Requirements. A brief description of permits and regulatory requirements for the proposed action is provided.
- 7.0 Organizations Consulted. Any outside agencies, groups, or individuals contacted as part

of environmental assessment documentation preparation are listed.

8.0 References. Documents used to provide information or data are listed.

The appendices contain additional information necessary to support an understanding of the proposed action, alternatives, and potential impacts is provided. Comments resulting from review of the environmental assessment by states and tribes or other stakeholders and the response to those comments will be included in the appendices.

**GLOSSARY**

|        |   |
|--------|---|
| AOP    | Air Operating Permit  |
| CEQ    | Council on Environmental Quality                                      |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CLUP   | Comprehensive Land Use Plan   |
| CFR    | Code of Federal Regulations   |
| DOE    | U.S. Department of Energy   |
| EA     | Environmental Assessment  |
| EIS    | Environmental Impact Statement  |
| EPA    | Environmental Protection Agency                                       |
| ESA    | Endangered Species Act of 1973  |
| FONSI  | Finding of No Significant Impact                                      |
| GSA    | General Services Administration                                       |
| NAAQS  | National Air Ambient Quality Standards                                |
| NEPA   | National Environmental Protection Agency                              |
| NMFS   | National Marine Fisheries Service                                     |
| NPL    | National Priorities List  |
| POB    | Port of Benton  |
| PSD    | Prevention of Significant Deterioration                               |
| RCT    | Radiological Control Technician                                       |
| RL     | U.S. Department of Energy Richland Operations Office                  |
| SHPO   | State Historic Preservation Officer                                   |
| WDOE   | Washington Department of Ecology                                      |

**METRIC CONVERSION CHART**

Into metric units

Out of metric units

| If you know        | Multipl<br>y by                                      | To get                   | If you know              | Multipl<br>y by                              | To get          |
|--------------------|--|--------------------------|--------------------------|--|-----------------|
| <b>Length</b>      |  |                          | <b>Length</b>            |  |                 |
| inches             | 2.54   | centimete<br>rs          | centimete<br>rs          | 0.393  | inches          |
| feet               | 0.305  | meters                   | meters                   | 3.28   | feet            |
| yards              | 0.914  | meters                   | meters                   | 1.09   | yards           |
| miles              | 1.61   | kilometer<br>s           | kilometer<br>s           | 0.62   | miles           |
| <b>Area</b>        |  |                          | <b>Area</b>              |  |                 |
| square<br>feet     | 0.092  | square<br>meters         | square<br>meters         | 10.76  | square<br>feet  |
| square<br>yards    | 0.836  | square<br>meters         | square<br>meters         | 1.20   | square<br>yards |
| square<br>miles    | 2.59   | square<br>kilometer<br>s | square<br>kilometer<br>s | 0.39   | square<br>miles |
| square<br>feet     | $2.296 \times 10^{-5}$                               | acres                    | acres                    | $4.36 \times 10^4$                           | square<br>feet  |
| acres              | 0.404  | hectares                 | hectares                 | 2.47   | acres           |
| <b>Volume</b>      |  |                          | <b>Volume</b>            |  |                 |
| cubic<br>feet      | 0.028  | cubic<br>meters          | cubic<br>meters          | 35.31  | cubic<br>feet   |
| cubic<br>yards     | 0.76   | cubic<br>meters          | cubic<br>meters          | 1.31   | cubic<br>yards  |
| gallons            | 3.79   | liters                   | liters                   | 0.26   | gallons         |
| <b>Temperature</b> |  |                          | <b>Temperature</b>       |  |                 |
| Fahrenhei<br>t     | subtrac<br>t 32<br>then<br>multipl<br>y by<br>5/9ths | Celsius                  | Celsius                  | multipl<br>y by<br>9/5ths,<br>then<br>add 32 | Fahrenhe<br>it  |

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## **1.0 PURPOSE AND NEED FOR ACTION**

The following sections describe the purpose and need and provide background information concerning this environmental assessment (EA).

### **1.1 PURPOSE AND NEED**

The U.S. Department of Energy, Richland Operations Office (RL) needs to reduce indirect costs by optimizing site infrastructure. Due to downsizing at the Hanford site and consolidation of resources, the 1100 Area and southern rail connection will not be required for Hanford operations.

### **1.2 BACKGROUND**

The 1100 Area is located in the southern-most portion of the Hanford Site, adjacent to the City of Richland in Benton County, Washington. It occupies approximately 311 hectares (768 acres), a large portion of which is undeveloped, on the west side of Stevens Drive, north of Snyder Road and south of Horn Rapids Road. The 1100 Area currently serves as a procurement, central warehousing, vehicle maintenance, transportation, and distribution center for the Hanford Site. Property adjacent to the 1100 Area is zoned by the City of Richland for heavy manufacturing, medium industrial, and limited manufacturing. The 1100 Area is shown as Industrial and Commercial property in the Draft Hanford Remedial Action Environmental Impact Statement (EIS) and the Comprehensive Land Use Plan (CLUP), (DOE, 1996). There are approximately 115 potential legal instruments (i.e., agreements, deeds, easements, permits) which are associated with the property. Existing interest in the legal instruments will be transferred with the subject property. The proposed action will not affect the railroad system north of Horn Rapids Road.

RL received an unsolicited proposal from the Port of Benton (POB) requesting transfer of the southern connection of the Hanford railroad and the 1100 Area. The POB is a political subdivision of the State of Washington chartered to engage in economic development activities. The POB developed a long-range plan to integrate the Hanford rail system and associated infrastructure into a regional Freight Mobility and Industrial Center.



## **2.0 DESCRIPTION OF THE PROPOSED ACTION**

The proposed action involves the transfer of ownership of the 1100 Area consisting of 311 hectares (768 acres), the southern rail connection consisting of 25.76 kilometers (16 miles), and rolling stock to a non-federal entity. The proposed transfer would occur under the authority of the Atomic Energy Act. Any rolling stock that is not transferred would be excessed. The real and personal property is located in the southwest quarter of Section 15, Township 10 North, Range 28 East, Willamette Meridian, and the east half of Section 22 and 27, Township 10 North, Range 28 East, Willamette Meridian, except for that portion of Section 27 described as the southwest quarter of the southeast quarter (Figures 1 and 2). Also included as part of the subject property is the southern connection of the Hanford railroad. This connection begins at the Union Pacific Richland Junction near the Columbia Center at the northwest boundary of the City of Kennewick and extends northerly along Highway 240; over U.S. Highway 12; across the Yakima River; then west/northwest and over U.S. Interstate 182; then along the east side of the Richland Airport and through the Hanford 1100 Area to Horn Rapids Road (Figure 3). The section of rail is approximately 6.24 kilometers (16 miles) long. The Yakima River delta is owned by the Corps of Engineers. This proposed action concerns the usage of the railroad right-of-way. The current commercial users of the railroad are Lamb Weston and Heningsen Cold Storage. The receiving entity will operate and lease equipment for the railroad system. The proposed action is consistent with the site missions of economic transition, re-use of current assets, and optimization of land holdings. The railroad system north of Horn Rapid Road will not be affected by this proposed activity. The 1100 Area Facilities are listed in Table 2-1.

### **2.1 PROPOSED TIMING**

The proposed transfer would be accomplished by the end of September, 1998. The appraised value of the 1100 Area was approximately \$4.2 million and that of the southern rail connection was \$1.0 million.

### **2.2 ENVIRONMENTAL INFORMATION**

#### **2.2.1 Soil or Subsurface Disturbance and the Consequences**

All areas within the proposed action are previously disturbed areas. It is anticipated that any soil and subsurface activities associated with this transfer would be temporary, therefore the anticipated impacts to the environment are not expected to be consequential.

#### **2.2.2 Liquid Discharges to the Groundwater or Surface Waters and the Consequences**

Stormwater runoff is the only liquid discharge from the 1100 Area. It is routed to a combination of catch basins and dry wells as documented in the Draft Inventory of Miscellaneous Streams (DOE-RL, 1997). The proposed action would not generate any liquid discharges. The majority of the floor drains in the 1100 Area facilities have been plugged with grout. However, there are two open floor drains in the 1171 facility.

The 1100 Area sewer system ties into the City of Richland municipal sanitary sewer system. One trunk line collects sewage from the 1163, 1167, and 1170 Buildings. A second trunk line collects sewage from the 1171 and 1172-A Buildings. Both lines cross under Stevens Drive and Route 4S and connect to the Richland sewer collection system.

### **2.2.3 Hazardous Substances Present and Consequences**

Hazardous materials were stored and used within the 1100 Area. The 1161, 1168, and 1171 storage facilities currently contain halogens and noble gases. All hazardous materials will be removed prior to transfer of ownership.

The 1100 Area has fifty-six Heating, Ventilation, and Air Conditioning units which contain a total of 428.5 pounds of Freon 22 (1,1,1-chlorodifluorethane) which is a Class II ozone depleting substance. The units are currently active and are serviced by Morrison Refrigeration. Drinking fountains, refrigerators, and ice machines also contain a small amount of refrigerant.

The 1100 Area had three 90-day accumulation areas which have been closed: one north of the 1171 facility which operated from 1985-1990; one at the 1164 facility which closed June, 1997; and one east of the 1176 facility which closed August, 1997. The current 90-day accumulation area northwest of the 1164 facility will be closed prior to the proposed transfer.

With the exception of the 1162 and 1163 Buildings, fluorescent light fixtures in the 1100 Area are likely to have ballast capacitors containing PCBs. Leaks from overheated ballasts could pose a threat to human health and the environment.

Asbestos-containing material is fixed and present in most of the 1100 Area buildings, with the exception of the 1162 and 1163 facilities which have no asbestos. The asbestos does not pose an immediate health threat and is not required to be removed prior to transfer.

**Table 2-1. 1100 Area Facilities**

| Number | Facility Name                                   | Size (sq. ft.) | Contractor | Type |
|--------|---|----------------|------------|------|
| MO-404 | Mobile Office @ 1163                            | 7,392          | LMSI       | M    |
| MO-916 | Mobile Office @ 1163                            | 1,584          | LMSI       | M    |
| MO-938 | Mobile Office @ 1163                            | 1,584          | LMSI       | M    |
| MO-940 | Mobile Office @ 1163                            | 1,344          | LMSI       | M    |
| X4     | Railroad Tool Shed                              | 168            | DYN        | B    |
| 1112   | Gas Storage Shed                                | 64             | DYN        | B    |
| 1161   | Nitrogen Bottle Facility & Propane Fill Station | 480            | DYN        | B    |
| 1162   | Flammable Material Storage                      | 8,900          | DYN        | B    |
| 1163   | Central Warehouse                               | 181,780        | DYN        | B    |
| 1164   | Hazardous Storage Facility                      | 2,000          | DYN        | B    |
| 1167   | General Stores Covered Storage Bldg.            | 36,000         | DYN        | B    |
| 1167A  | Excess Salvage Office Building                  | 2,185          | DYN        | B    |
| 1168   | Cylinder Storage Facility                       | 4,110          | DYN        | B    |
| 1169   | Chemical Storage Facility                       | 2,400          | DYN        | B    |
| 1170   | Bus Terminal Dispatchers Building               | 6,657          | DYN        | B    |
| 1171   | Main Transportation Shop Building               | 94,767         | DYN        | B    |
| 1171A  | Bus Wash Facility Add-On to 1171                | 256            | DYN        | B    |
| 1171C  | Spare Parts Storage Shed                        | 1,000          | DYN        | B    |
| 1172A  | Conoco Station                                  | 200            | DYN        | B    |
| 1173   | Motor Stores Building                           | 3,216          | DYN        | B    |
| 1175   | Storage   | 2,400          | DYN        | B    |
| 1176   | Tire Storage Building                           | 800            | DYN        | B    |
| 1177   | Storage Building                                | 768            | DYN        | B    |
| 1179   | Road Crew Storage                               | 1,008          | DYN        | B    |
| 11201  | N. 40 Tool Shed                                 | 1,250          | DYN        | B    |
| X1     | Railroad Scale House                            | 70             | DYN        | S    |
| 1171B  | Equipment Wash Facility                         | 4,200          | DYN        | S    |
| 1174   | Bulk Petroleum Storage Facility                 | 48             | DYN        | S    |

DYN = DynCorp Tri-Cities Services, Inc.  
LMSI = Lockheed Martin Services, Inc.

M=Mobile  
B=Building

S=Structure

### **3.0 ALTERNATIVES TO THE PROPOSED ACTION**

Alternatives to the proposed action are discussed in the following sections.

#### **3.1 NO ACTION ALTERNATIVE**

The No Action alternative would involve the continued DOE operation and ownership of the 1100 Area facilities and the Hanford southern rail connection. The reduction of indirect costs by optimizing site infrastructure would not be met. In the future when DOE would no longer have a need for the 1100 Area, the 1100 Area would be placed in surveillance and maintenance mode.

#### **3.2 OTHER ALTERNATIVES**

An alternative would be for DOE to retain ownership and lease facilities and the railroad system to non-federal entities.

Another alternative would be to transfer a portion of the 1171 facility (heavy and light equipment shop), the 1171 C (track Maintenance Storage), the Railroad Tool Shed, the Railroad Scale House, and the southern connection of the Hanford rail line. DOE would retain the right to use space in the 1171 facility and other facilities within the 1100 Area, as required to meet mission activities.

The 1100 Area and southern rail connection could also be transferred to General Services Administration (GSA) for excess of property and equipment.

## 4.0 AFFECTED ENVIRONMENT

The following sections provide a discussion of the existing environment to be affected by the proposed action and alternatives.

### 4.1 GENERAL HANFORD SITE ENVIRONMENT

The Hanford Site is 1,450 square kilometers (560 square miles) located in southeastern Washington State in a semiarid region with rolling topography. Two topographical features dominate the landscape: Rattlesnake Mountain is located on the southwest boundary with Gable Mountain located on the central portion of the Hanford Site. The Columbia River flows through the northern part of the Hanford Site and forms part of the eastern boundary of the Hanford Site. Areas adjacent to the Hanford Site are primarily agricultural lands. The 1100 Area has been heavily used as an industrial area since the 1950s.

The Hanford Site is located in a semiarid region of southeastern Washington State. The Cascade Mountains, beyond Yakima to the west, greatly influence the climate of the Hanford area by means of their "rain shadow" effect. This mountain range also serves as a source of cold air drainage, which has a considerable effect on the wind regime on the Hanford Site (Neitzel, 1997). Climatological data are available from the Hanford Meteorological Station.

The 1995 emission rates of nonradiological constituents at the Hanford Site remained below all established limits set for regulated air pollutants (Neitzel, 1997). Atmospheric dispersion conditions of the area vary between summer and winter months. The summer months generally have good air mixing characteristics. If the prevailing winds from the northwest are light, less favorable dispersion conditions might occur. Occasional periods of poor dispersion conditions occur during the winter months.

Most mammal species known to inhabit the Hanford Site are small, nocturnal creatures; primarily pocket mice and jackrabbits. Large mammals found on the Hanford Site are deer and elk; although the elk exist almost entirely on the Arid Lands Ecology Reserve. Coyotes and raptors are primary predators. Several species of small birds nest in the shrub-steppe vegetation. Semiannual peaks in avian variety and abundance occur during migration seasons. Additional information about the Hanford Site can be found in the publication entitled the *Hanford Site National Environmental Policy Act (NEPA) Characterization* report (Neitzel, 1997).

RL and its contractors employ nearly 20% of the total nonagricultural workers in Benton and Franklin counties. Therefore, activity on the Hanford Site plays a major role in the socioeconomic environment of the Tri-Cities and other parts of Benton and Franklin Counties

(Neitzel, 1997)

## **4.2 SPECIFIC SITE ENVIRONMENT**

The 1100 Area is located in the southern-most portion of the Hanford Site and occupies approximately 311 hectares (768 acres) (Figures 1 and 2). The Hanford Site was added to the National Priorities List (NPL) in July 1989 based on the Environmental Protection Agency's Hazard Ranking System. Four sites were designated on the NPL, the 1100 Area was one of these sites. The DOE, Environmental Protection Agency (EPA), and Washington Department of Ecology (WDOE) entered into a Hanford Federal Facility Agreement and Consent Order in May, 1989 that established a protocol for developing, implementing, and monitoring remedial response actions. These response actions were developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). In September, 1993, the Record of Decision (ROD) for the 1100 Area NPL site was issued, signed by DOE, EPA, and WDOE. The ROD identified the remedial action for these operable units and stated that no further action was required. The 1100 Area was declared clean and the EPA issued a delisting from the NPL September, 1996.

### **4.2.1 Climate**

The Hanford Site is characterized as having a mild climate with 15 to 17 centimeters (6 to 7 inches) of annual precipitation, and occasional high winds of up to 129 kilometers (80 miles) per hour occur throughout the year. Ranges of daily maximum temperatures vary from normal maxima of 2°C (36°F) in early January to 35°C (95°F) in late July. On the average, there are 52 days during the summer months with maximum temperatures  $\geq 32^{\circ}\text{C}$  (90°F) and 12 days with maxima greater than or equal to 38°C (100°F). During the winter there are 3 days with minimum temperatures  $\leq -18^{\circ}\text{C}$  (0°F). Tornadoes are extremely rare; no destructive tornadoes have occurred in the region surrounding the Hanford Site.

### **4.2.2 Hydrology**

The groundwater in the 1100 Area is not impacted by Hanford Site operations. In addition to natural recharge, artificial recharge is associated with the North Richland recharge basins south of the 1100 Area. The water table in the 1100 Area reflects irrigation cycles connected with agriculture and the growing season.

### **4.2.3 Floodplain**

The 1100 Area and southern rail connection are not susceptible to a 100-year flood on the Yakima and Columbia Rivers.

#### **4.2.4 Air Resources**

The Hanford Site operates under the Prevention of Significant Deterioration (PSD) permit issued by the EPA in 1980 to protect existing ambient air quality. The Hanford Site Air Operating Permit (AOP) Application (DOE, 1995) states that there are only insignificant air emission units for the 1100 Area. No substantial increases in overall emissions are envisioned from the proposed action and no changes to the AOP would be required.

#### **4.2.5 Ecological Resources**

The Biological Review, (Appendix A), indicated that the majority of the railroad corridor consists of disturbed habitat, except for some remnant habitat along the margins of the corridor. None of the species observed are listed as species of concern by the State or Federal Governments. No migratory bird species were observed nesting in the vicinity of the rail corridor. No plant and animal species protected under the Endangered Species Act (ESA), candidates for such protection or species listed by the Washington state government as threatened or endangered were observed either within the railroad right-of-way between the 1100 Area and Columbia Center Boulevard. One plant species of concern, the stalked-pod milk-vetch (*Astragalus sclerocarpus*) observed in the 1100 Area, is on the Washington Natural Heritage Program Watch List, the lowest level of listing by the State of Washington.

Bald eagles are occasionally sighted during winter months in the Yakima River delta but are not known to use the area for nesting. Steelhead trout in the Yakima River basin have been recently proposed for listing as threatened by the National Marine Fisheries Service (NMFS). All of these steelhead would pass beneath the railroad bridge over the Yakima River during their migrations to and from the Pacific Ocean. The continued use of the railroad corridor for rail traffic would not alter the current conditions and will not likely adversely affect the continued existence of the bald eagle and the Yakima Basin steelhead.

#### **4.2.6 Cultural Resources**

A Cultural Review (Appendix B) was conducted for the proposed action. The review concluded that the project area has one isolated find and 18 archaeological sites. Of the 18 sites found, only two may be considered eligible for listing on the National Register of Historic Places: an irrigation canal and the Deranleau farmstead. The other 16 sites and one isolate find are probably not eligible for listing, but will require formal evaluation for determination of eligibility for listing on the National Register of Historic Places. Although these may not be eligible sites for

listing on the National Register, they are tied to the early development of Richland and are important to the local history of the area. Appropriate documentation will be completed and submitted to the SHPO for concurrence. A clause would be stipulated into the transfer document for preservation and protection.

The Hanford Site Historical Task Team performed a cultural review for historical significance of the 1100 Area Complex in 1997 and determined that the 1167, 1167A, 1170, 1171, the Railroad Tool Shed, and the Railroad Scale House facilities are eligible for inclusion in the National Register of Historic Places. These facilities are contributing property recommended for mitigation within the Hanford Site Manhattan Project and Cold War Era Historic District as stipulated in Appendix C, Table 1 of the Programmatic Agreement among RL, the Advisory Council on Historic Preservation, and the Washington State Historic Preservation Office (SHPO) for the Maintenance, Deactivation, Alteration, and Demolition of the Built Environment on the Hanford Site, Washington (DOE-RL, 1996).

On February 3, 1998 a walkthrough of the eligible facilities was undertaken by representatives of DOE-RL and its contractors for the purpose of identifying, assessing, and retaining historic artifacts associated with the Manhattan Project and Cold War era. The walkthrough was conducted in compliance with the Programmatic Agreement to assess the contents of historic buildings and structure to locate and identify any artifacts which may have interpretive or educational value as exhibits within local, state, or national museums. The assessment team identified and tagged thirty-two artifacts in Building 1171, four in Building 1170 and one in Railroad Scale House (see Appendix C). The specific issues surrounding the historical significance of the facilities have been discussed between DOE-RL and the SHPO.

#### **4.2.7 Radiological Survey**

A random direct radiological verification survey for beta-gamma contamination was performed by a Radiological Control Technician (RCT) on the railroad in between railroad ties including the track from Horn Rapids Road to the Union Pacific Richland Junction at the northwest boundary of the City of Kennewick. The verification survey was completed and no contamination was detected.



### **4.3 REMEDIAL ACTION**

The requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which are pertinent to the sale, transfer, and lease of property by federal agencies, clarify the extent of remedial action necessary to protect human health and the environment. In accordance with the requirements imposed by Section 120(h) of CERCLA, records pertaining to the 1100 Area were reviewed, and interviews with personnel associated with the complex were conducted. A visual inspection of the 1100 Area and adjacent properties was also conducted. The review concluded that there were no releases or storage on the property in amounts that would have exceeded CERCLA reportable quantities. Pursuant to the regulations, no notice regarding hazardous substances activity (storage, release, or disposal) would be required. The process of the assessment meets the requirements of CERCLA for the sale or transfer of federal property.

## **5.0 ENVIRONMENTAL IMPACTS**

The following sections describe impacts from the proposed action.

### **5.1 TRANSFER AND POST OPERATION IMPACTS**

Impacts connected with the 1100 Area and southern rail connection are expected to remain the same after the transfer as they were before the transfer. Impacts are limited to small quantities of gaseous, particulate, or thermal discharge activities from transportation trucks and rail line activities. No adverse impacts to species, habitats, or other biological resources are expected to result from the proposed transfer of the 1100 Area and the southern rail connection.

### **5.2 SOCIOECONOMIC IMPACTS**

No workers would be directly affected by the proposed action. The transfer of the 1100 Area to a non-federal entity would reduce operating costs at Hanford and encourage economic diversification.

### **5.3 ENVIRONMENTAL JUSTICE IMPACTS**

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or socioeconomic effects of their programs and activities on minority and low-income populations. Minority (primarily Hispanic) populations and low income populations are present near the Hanford Site (Neitzel, 1997). The analyses of the impacts in this EA indicate there would be minimal impact to both the offsite population and potential workforce by implementing the proposed action.

### **5.4 CULTURAL RESOURCES**

Eighteen archaeological sites and one isolated find will be evaluated to determine the eligibility criteria for listing on the National Register of Historic Places. The proposed action will not impact the historical significance of these identified sites. A clause would be stipulated into the transfer document for preservation and protection. A memorandum of agreement would be developed by SHPO, RL and the non-federal entity that provides a plan for the preservation and enhancement of cultural and historical resources within the Hanford District.

### **5.5 CUMULATIVE IMPACTS**

The impacts from the proposed action are not expected to substantially change the cumulative impacts of operations on the Hanford Site and surrounding area. Potential impacts from future land uses are unknown and analysis at present would require speculation.

## **5.6 IMPACTS FROM ALTERNATIVES**

### **5.6.1 Implementation of the No Action Alternative**

The No Action alternative would not change the current impacts to the environment.

### **5.6.2 Implementation of Alternatives**

There would be no change in environmental impacts with any of the alternatives described in section 3.0. Potential impacts from future land uses are unknown and analysis at present would require speculation.

## **6.0 PERMITS AND REGULATORY REQUIREMENTS**

The trustee would be required to comply with all applicable federal and state environmental requirements.

## 7.0 ORGANIZATIONS CONSULTED

The DOE consulted the SHPO regarding the historical facilities within the 1100 Area. The facilities are eligible for listing on the *National Register of Historic Places*. DOE also consulted with the U.S. Fish and Wildlife Service concerning threatened and endangered species, and species of concern.

Tribal and public involvement are important components of a cultural resource management program. Tribes and public have roles and responsibilities in ensuring that Hanford cultural and historic resources are protected, managed, and interpreted appropriately. To help to encourage this involvement, Hanford cultural staff conduct regular meetings with the Tribes and public to discuss site issues. The meetings allow participants to openly discuss issues, exchange information, and voice their concerns. The 1100 Area property transfer was among the topics discussed at these meetings, which provided cultural staff the opportunity to review the project activities and update the participants on the status of the project. The Tribal Cultural Issues meetings are attended by Hanford cultural staff and cultural resource representatives from the Confederated Tribes of the Umatilla Indian Reservation, the Yakama Indian Nation, the Nez Perce Tribe and the Wanapum. The 1100 Area was a topic of discussion at Cultural Issues meetings held on January 20, February 18, and July 28, 1998. Public Issues Exchange meetings are attended by the cultural staff and interested parties from the public, including local historical societies and museums, counties, and private citizens. Similar information was discussed at Public Issues Exchange meetings held on March 4, May 11, and June 16, 1998.

Prior to approval of this EA, a draft version was sent to the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, the Wanapum, the Yakama Indian Nation, Washington State Department of Ecology, U.S. Army Corps of Engineers, Port of Benton, City of Richland, City of Kennewick, TRIDEC, Washington State Railroad Historical Society, B Reactor Historical Society, Benton County, Hanford Education Action League, Heart of America, and Physicians for Social Responsibility for a 30 day review period. The draft was also be made available in the DOE Reading Room and placed on the Internet at the DOE-RL homepage.

All comments were considered in the preparation of the final EA, and in the DOE decision whether to resolve the EA as a Finding of No Significant Impact (FONSI) or as a determination to prepare an Environmental Impact Statement. Comments were received from the U.S. Army Corps of Engineers, the Washington State Department of Fish and Wildlife, a Hanford employee, and one private citizen. Comments and responses are contained in Appendix E.

## 8.0 REFERENCES

10 CFR 1021, DOE "National Environmental Policy Act Implementing Procedures".

29 CFR 1910, "Occupational and Safety Health Administration".

40 CFR 61, "National Emission Standards for Hazardous Air Pollutants".

40 CFR 373, "Comprehensive Environmental Response, Compensation, and Liability Act".

40 CFR 761, "Polychlorinated Biphenyls".

40 CFR 763, "Asbestos".

ASTM Standard E.50.20.1, "Transaction Screen Process".

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DOE-RL, 1993, *Hanford Mission Plan, Volume 1, Site Guidance*, DOE/RL-93-08, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

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DynCorp, 1998, *Hanford Railroad Shutdown Project Plan*, DynCorp Tri-Cities Services, Inc.

EPA to DOE-RL, 1996, "Awarded Certification of Completion".

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U.S. DOE and EPA, 1993, *U.S. DOE, EPA, Ecology, Declaration of Record of Decision - USDOE Hanford 1100 Area, Hanford Site Benton, County, Washington*.

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**APPENDIX A**  
**BIOLOGICAL REVIEW**



**APPENDIX B**  
**CULTURAL REVIEW**

**APPENDIX C**  
**HISTORICAL REVIEW**

**APPENDIX D**  
**SHPO CORRESPONDENCE**

**APPENDIX E**  
**COMMENTS AND RESPONSES**